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Factos affecting thermosyphon performance - A review of studies (Review)

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Abstract

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The utilization of the two-phase thermosyphons (TPTs) is expanding for some warmth exchange applications. This paper reviews the performance of thermosyphon TPT systems. The impact of the influencing parameters on the execution of TPTs for example geometry, filling ratio,working liquid and the inclination angle by different researchers are discussed. The various working limits happening in a thermosyphon that includes dry out, and flooding affects likewise examined. Based on many factors reviewed it shows that the filling ratio exerts small influence in heat transfer and influence is more noticeable for inclination angles. Circulation of working fluid that aided by effects of gravity disable thermosyphon to perform in horizontal position.In addition, it is expected dry out effect could easily occur in the case of high power input, low fill ratio and high inclination angle. This paper could utilize as the beginning point for the researches keen on the TPTs and their renewable energy applications. © BEIESP.

SciVal Topic Prominence

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